# BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

| In the Matter of   |     |             | MAY - 8 1996   |
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| The Provision of Interstate and International Interexchange Telecommunications Service via the | ) ) | RM No. 8775 | AN CAMBRIDGE P |
| "Internet" by Non-Tariffed, Uncertified<br>Entities  | )   |             |                |
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Comments in Opposition to

America's Carriers Telecommunication Association ("ACTA")

Petition for Declaratory Ruling,

Special Relief, and Institution of Rulemaking

### Center for Democracy and Technology

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#### I. Introduction

#### A. Summary

The Center for Democracy and Technology files these comments in opposition to the America's Carriers Telecommunication Association ("ACTA") Petition, which asks the Commission to engage in rule-making concerning "Internet telephony" real-time audio software applications and to immediately prohibit companies and individuals from distributing such software.\(^1\) The Center strongly opposes ACTA's requests.

The ACTA Petition's request for immediate relief would put the Commission in the position of dictating how individuals use the network communications services which are available to them through the Internet. The request is equivalent

<sup>&</sup>lt;sup>1</sup> Petition for Declaratory Ruling, Special Relief, and Institution of Rulemaking of America's Carriers Telecommunication Association ("ACTA") (filed March 4, 1996) [Hereafter The Petition] The Petition's call for Special Relief asks the Commission to "issue an order to the Respondents to immediately stop arranging for, implementing, and marketing non-tariffed, uncertified telecommunications services without complying with applicable provisions of the [Telecommunications Act]..."

to the post office asking the Commission to tell individuals that they cannot use faxes, or that they cannot send email. The Commission's traditional responsibility has been the underlying network and communications media and services, not how individuals use those services. Moreover, ACTA's petition would involve the Commission in intrusive regulation of computer software at the highest levels of the network protocol stack — a highly innovative area the Commission has wisely thus far been wary of interfering with. For these reasons, CDT believes the Commission should deny ACTA's requests for Special Relief, a Declaratory Ruling, and Institution of Rulemaking. To date, the Internet has flourished as a revolutionary communications medium which enhances the free expression opportunities and diversity of information available to all Americans. The Commission should consider carefully any call to stifle the continued growth of this medium.

#### **B.** Statement of Interest

The Center for Democracy and Technology (CDT) is an independent, non-profit public interest policy organization in Washington, D.C. The Center's mission is to develop and implement public policies to protect and advance individual liberty and democratic values in new digital communications media. The Center achieves its goals through policy development, public education, and coalition building. CDT's staff has worked extensively on issues concerning free speech, privacy, and other issues affecting democratic values in new digital media, particularly with regard to the Internet. CDT is pleased to have this opportunity to comment publicly on this new request for rule-making and special relief that implicates many of it's long-standing concerns about the democratic potential of the new digital media.

CDT is particularly concerned that the voice of Internet users be heard in this Request for Comments. The requests made by ACTA in its petition require the Commission to take intrusive and unprecedented steps in the regulation of one of the most quickly growing areas of new communications media - the Internet. The Internet today is characterized by high growth, innovation, and an unprecedented opportunity to promote the free flow of information for individuals and businesses throughout the U.S. and around the world. As such, CDT believes that any regulatory steps taken with regard to Internet telephony must be considered in light of fundamental communications policy objectives: free expression, access to a diversity of information sources, and access to high quality innovative services.

### II. ACTA's Requests Would Restrict the Free Expression and Communications Capability of Computer Users

A. <u>Background: Internet Telephony Applications are Just One of Many New Communications Tools Available to Computer Users</u>

The ACTA Petition refers to the growing class of applications software that carry audio in real-time over underlying Internet network services. Today, "Internet telephony" software programs generally provide some form of voice conferencing in real time between software packages running on computers at both ends of the communication. These programs commonly utilize packet-based communications services available through the Internet, but could also operate over private networks such as increasingly popular "Intranets."

Despite claims in the ACTA Petition, these services are not provided at no charge. Users must already own the extensive hardware and software platform

required to connect to the Internet, and to run the real-time audio conferencing software. This investment may also include microphones and speakers that many computer systems do not already have. Most significantly, users must also pay for the connection fees charged their Internet Service Provider.

Real-time audio programs provide just one example of many new communications choices being made by individuals and companies that utilize the Internet and other new digital networks. Among the range of increasingly popular applications available to today's computer users are: electronic mail, which remains one of the most popular application on the Internet; "chat" applications, such as Internet Relay Chat or many other proprietary services, which allow real-time text-based communication; audio applications, such as RealAudio [tm], which have been increasingly popular on the World Wide Web and allow users and publishers to exchange audio in both real-time and otherwise; and video applications, including real-time video conferencing software.

The ACTA Petition would require the Commission to regulate otherwise indistinguishable data packets on the basis of what they contain. From the point of view of the underlying communications services that real-time audio software use, the data packets generated by audio software are virtually indistinguishable from these other applications. Whether generated by real-time audio conferencing software, electronic mail, or video file transfers, the digital data make use of the same underlying network communications services and have the same form.

B. ACTA's Request Would Restrict the Ability of Computer Users to Freely Decide

How They Use Underlying Communications Services and to Choose

Communications Applications That Best Meet Their Needs

The ACTA requests would not restrict a basic communications service, but rather a specific and indistinguishable application that makes use of underlying

communications services. ACTA's request for special relief and rule-making singles out a particular type of application for regulation, based solely on the <u>contents</u> of the data packets it sends.

The request would place the Commission in the place of preventing individuals from choosing the types of software applications that best meet their needs. ACTA asks the Commission to end the distribution of real-time audio products alone. Computer users may use email or video-conferencing applications, but not real-time audio conferencing. They may use audio applications that do not involve real-time exchange; presumably they may use audio applications that involve mutual broadcast of audio, so long as there is no real-time, one-to-one exchange. If the post office sought to have individuals enjoined from using faxes or telephones to send their messages, the Commission would object to this check on the legitimate choices of users and the benefits of competition. CDT believes that the Commission should deny Petitioners analogous requests in this instance.

# III. The Commission Should Avoid Highly Intrusive Regulation of Specific Applications at the Highest Layer of the Communications Protocol Stack

### A. The "Layered" Internet Communications Protocol Stack

The success of the Internet is often attributed to, among other things, the "layered" approach of its architecture. (See Fig. 1 below) This architectural separation of underlying network services from applications allows developers and users at each "layer" to abstract or ignore many of the specifics of underlying network technologies. This approach has allowed applications and underlying communications services they make use of to evolve and innovate. It also distinguishes applications, such as real-time audio software, that use

communications services, from lower layer software such as implementations of the Transport Control Protocol of the Internet Protocol, which provide communications service to higher layer applications.

Fig. 1 - The Internet Layered Architecture and Examples

| Application Layer | Electronic Mail IRC and other Real-Time Text Exchange Audio Conferencing Video Conferencing Word Processing, Financial Software, and many, many others applications. |
|-------------------|--|
| Transport Layer   | Transport Control Protocol (TCP) User Datagram Protocol (UDP)  |
| Network Layer     | Internet Protocol (IP)   |

### B. The Commission Should Continue To Avoid Regulation at the Application Layer In Order to Maintain Innovation and Competition

The ACTA Petition calls for the Commission to grant Special Relief and institute Rule-Making proceedings regarding a specific type of software that is part of the Application Layer of the Internet communications protocol stack. The Commission should avoid this new form of regulation.

The application layer in particular represents an area characterized by innovation that has led to tremendous benefits for users. It is better left to those forces of innovation than the intrusive regulation of specific applications requested by the ACTA Petition. The Special Relief sought by ACTA would require the Commission to involve itself with choices about software applications that make use of underlying network communications services in a way indistinguishable

from other applications. The Commission should allow these new technologies to develop -- and to succeed or fail in the market depending on the expressed choices made by users.

Allowing these technologies to develop unhindered may also lead to the competition that computer users have long desired from the packagers and presenters of underlying communications services. It might be noted that it is exactly this competition that the ACTA petitioners fear — the development by innovative software providers of the means of taking advantage of existing communications service that are more efficient and more attractive than packaging that ACTA currently provides.

The Commission has thus far wisely avoided making regulatory choices at the applications level. The Commission has exercised similar judgment in the past in other contexts such as Enhanced Services, and should do so in the area of Internet applications as well.

IV. Congress Has Specifically Decided That it is the Policy of the
United States Not to Regulate Internet Access Software, Such
As Real-Time Audio Software, As the ACTA Petition Would
Require

The ACTA Petition proposes exactly the sort of regulation of the Internet that Congress expressly stated that it intended to avoid when it passed the Telecommunications Act of 1996. In legislative findings with regard to the regulation of the Internet, Congress expressly stated:

It is the policy of the United States --

(1) to promote the continued development of the Internet and other interactive computer services and other interactive media;

(2) to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal and State regulation; . . . . 2

Congress specifically included in it's definition of "interactive computer services," the category of "access software providers":

"[A] provider of software (including client or server software), or enabling tools that do one or more of the following: . . . (C) transmit, receive, display, forward, cache, search, subset, organize, reorganize, or translate content."<sup>3</sup>

Real-time audio software clearly falls under the rubric of access software providers that Congress went out of it's way to protect under the recently passed Telecommunications Act. The special relief and rule-making sought by ACTA would directly interfere with the "the vibrant and competitive free market that presently exists for the Internet."

#### V. Conclusion

CDT believes that the ACTA request for special relief would immediately restrict the ability of computer users to choose the communications applications that best meet their needs. The ACTA petition would require that the Commission arbitrarily regulate the sale and use of one of the many new communications applications available today. ACTA would involve the Commission in regulation of the application layer of the network protocol stack, contrary to its previously expressed deference to innovation and competition in this arena. Finally, Congress has recently and explicitly expressed its intent to avoid just the sort of regulation of the Internet and interactive communications software that ACTA proposes. For

<sup>&</sup>lt;sup>2</sup>Telecommunications Act of 1996, Section 508, codified at 47 U.S.C. 230 (b) (1996).

 $<sup>^{3}</sup>$ Telecommunications Act of 1996, Section 508, codified at 47 U.S.C. 230 (e)(4) (1996).

these reasons, CDT urges the Commission to deny each of the requests of the ACTA petition.

Respectfully Submitted,

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